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WO009814601	156	1 - 156	1
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Summary

Document	Pages	Printed	Missed	Copies
WO009814601	156	156	0	1
Total (1)	156	156	0	-

09/980,771

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     (FILE 'HOME' ENTERED AT 07:48:52 ON 09 OCT 2003)

     INDEX 'ADISCTI, ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, AQUASCI,
     BIOBUSINESS, BIOCOMMERCE, BIOSIS, BIOTECHABS, BIOTECHDS, BIOTECHNO, CABA,
     CANCERLIT, CAPLUS, CEABA-VTB, CEN, CIN, CONFSCI, CROPB, CROPU, DDFB,
     DDFU, DGENE, DRUGB, DRUGLAUNCH, DRUGMONOG2, ...' ENTERED AT 07:49:04 ON
     09 OCT 2003
               SEA (STARCH SYNTHASE) OR (ADP GLUCOSE ALPHA-1,4-GLUCAN ALPHA-4-
               ---------
             345   FILE AGRICOLA
               5   FILE ANABSTR
               8   FILE AQUASCI
              31   FILE BIOBUSINESS
               1   FILE BIOCOMMERCE
             508   FILE BIOSIS
              96   FILE BIOTECHABS
              96   FILE BIOTECHDS
             152   FILE BIOTECHNO
             547   FILE CABA
               2   FILE CANCERLIT
             598   FILE CAPLUS
              14   FILE CEABA-VTB
               1   FILE CEN
               3   FILE CIN
              18   FILE CONFSCI
               1   FILE CROPU
             150   FILE DDFU
            2785   FILE DGENE
             150   FILE DRUGU
              76   FILE EMBASE
             196   FILE ESBIOBASE
              27   FILE FEDRIP
              85   FILE FROSTI
             200   FILE FSTA
            1122   FILE GENBANK
              52   FILE IFIPAT
              35   FILE JICST-EPLUS
             186   FILE LIFESCI
             171   FILE MEDLINE
               6   FILE NTIS
             607   FILE PASCAL
              11   FILE PROMT
             398   FILE SCISEARCH
              50   FILE TOXCENTER
             291   FILE USPATFULL
               6   FILE USPAT2
               1   FILE VETU
              72   FILE WPIDS
              72   FILE WPINDEX
L1             QUE (STARCH SYNTHASE) OR (ADP GLUCOSE ALPHA-1,4-GLUCAN ALPHA-4-
               ---------

     FILE 'PASCAL, CAPLUS, CABA, BIOSIS, SCISEARCH, AGRICOLA, USPATFULL, FSTA,
     ESBIOBASE, LIFESCI, MEDLINE, BIOTECHNO' ENTERED AT 07:52:00 ON 09 OCT 2003
L2           303 S L1 AND (FUSION PROTEIN OR HYBRID PROTEIN OR CHIMER?)
L3           108 S L2 AND (STARCH GRANULE)
L4            80 DUP REM L3 (28 DUPLICATES REMOVED)
L5            38 S L4 AND PHARMACEU?
L6             3 S L2 AND (STARCH ENCAPSULA?)
L7             3 DUP REM L6 (0 DUPLICATES REMOVED)
L8            38 S L3 AND PHARMACEU?
L9            38 DUP REM L8 (0 DUPLICATES REMOVED)
```

4 ANSWER 50 OF 80 USPATFULL on STN

ACCESSION NUMBER:	2002:88706 USPATFULL
TITLE:	Starches via modification of expression of starch biosynthetic enzyme genes
INVENTOR(S):	Broglie, Karen E., Landenberg, PA, United States Hubbard, Natalie L., Wilmington, DE, United States Klein, Theodore M., Wilmington, DE, United States Lightner, Jonathan E., Airville, PA, United States
PATENT ASSIGNEE(S):	E. I. du Pont de Nemours and Company, Wilmington, DE, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6376749	B1	20020423
APPLICATION INFO.:	US 1999-257894		19990225 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 91052, now abandoned		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1995-9113P	19951220 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Fox, David T.
NUMBER OF CLAIMS:	13
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	16 Drawing Figure(s); 16 Drawing Page(s)
LINE COUNT:	3202

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The instant invention discloses utilization of a cDNA clone to construct sense and antisense genes for inhibition of starch branching enzyme enzymatic activity in corn. More specifically, this invention concerns a method of controlling the starch fine structure of starch derived from the grain of corn comprising: (1) preparing a **chimeric** gene comprising a nucleic acid fragment encoding a starch branching enzyme structural gene or a fragment thereof, operably linked in either sense or antisense orientation on the upstream side to a nucleic acid fragment encoding a promoter that directs gene expression in corn endosperm tissue, and operably linked on the downstream side to a nucleic acid fragment encoding a suitable regulatory sequence for transcriptional termination, and (2) transforming corn with said **chimeric** gene, wherein expression of said **chimeric** gene results in alteration of the fine structure of starch derived from the grain of said transformed corn compared to the fine structure of starch derived from corn not possessing said **chimeric** gene.

L4 ANSWER 79 OF 80 AGRICOLA Compiled and distributed by the National Agricultural Library of the Department of Agriculture of the United States of America. It contains copyrighted materials. All rights reserved. (2003) on STN

ACCESSION NUMBER: 92:21077 AGRICOLA
DOCUMENT NUMBER: IND92003876
TITLE: Expression of a chimaeric granule-bound **starch synthase**-GUS gene in transgenic potato plants.
AUTHOR(S): Visser, R.G.F.; Stolte, A.; Jacobsen, E.
CORPORATE SOURCE: Wageningen Agricultural University, Wageningen, Netherlands
AVAILABILITY: DNAL (QK710.P62)
SOURCE: Plant molecular biology : an international journal on molecular biology, biochemistry and genetic engineering, Oct 1991. Vol. 17, No. 4. p. 691-699
Publisher: Dordrecht : Kluwer Academic Publishers.
ISSN: 0167-4412
NOTE: Includes references.
DOCUMENT TYPE: Article
FILE SEGMENT: Non-U.S. Imprint other than FAO
LANGUAGE: English

AB Granule-bound **starch synthase** is the key enzyme in amylose synthesis. The regulation of this gene was investigated using a chimaeric gene consisting of a 0.8 kb 5' upstream sequence of the granule-bound **starch synthase** gene from potato and the beta-glucuronidase gene which was introduced into potato using an Agrobacterium tumefaciens binary vector system. The chimaeric gene was highly expressed in stolons and tubers, whereas the expression in leaves, stems or roots from greenhouse-grown plants was relatively low. However, leaves from in vitro grown plantlets exhibited an elevated GUS expression. The expression of the chimaeric gene was inducible in leaves by growth on relatively high concentrations of sucrose, fructose and glucose and was about 30- to 50-fold higher than in leaves from greenhouse-grown plants. The granule-bound **starch synthase** gene is expressed organ-specifically since stolons and tubers showed GUS activities 125- to 3350-fold higher than in leaves. The activities in these two organs are 3- to 25-fold higher than the expression of the CaMV-GUS gene. Histochemical analysis of different tissues showed that only certain regions of leaves and roots express high GUS activities. Stolons and tubers show high expression.

L4 ANSWER 77 OF 80 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 4
ACCESSION NUMBER: 1996:502541 CAPLUS
DOCUMENT NUMBER: 125:163336
TITLE: Expression of Escherichia coli branching enzyme in tubers of amylose-free transgenic potato leads to an increased branching degree of the amylopectin
AUTHOR(S): Kortstee, Anne J.; Vermeesch, Angela M. S.; De Vries, Beja J.; Jacobsen, Evert; Visser, Richard G. F.
CORPORATE SOURCE: Graduate School Experimental Plant Sciences, Agricultural University, Wageningen, 6700 AJ, Neth.
SOURCE: Plant Journal (1996), 10(1), 83-90
CODEN: PLJUED; ISSN: 0960-7412
PUBLISHER: Blackwell
DOCUMENT TYPE: Journal
LANGUAGE: English

AB In order to increase the branching degree of potato tuber starch, the gene encoding branching enzyme (glgB) of Escherichia coli was expressed in the amylose-free potato mutant. The E. coli glgB was cloned in the binary vector pBIN19 under the transcriptional control of the potato Granule Bound **Starch Synthase** (GBSS) promoter and transit peptide sequence. The E. coli glgB was cloned behind the two N-terminal amino acids of the GBSS mature protein, creating a **chimeric** protein. Transgenic plants were obtained which expressed the E. coli branching enzyme as was shown by the presence of mRNA and protein in the tubers. Correctly processed protein was found both in the sol. and **starch granule** bound protein fraction. Anal. of the starch showed an increase in the branching degree (DE) of up to 25% more branchpoints. The increase in the no. of branchpoints was due to the presence of more short chains, with a d.p. (DP) of 16 glucose-residues or less in the amylopectin. Changes in other characteristics of the starch, such as av. chain length (CL) and .lambda.max, indicated a more branched structure for starch of transformed plants as well.

L4 ANSWER 70 OF 80 CAPLUS COPYRIGHT 2003 ACS on STN DUPLICATE 3
ACCESSION NUMBER: 1999:205718 CAPLUS
DOCUMENT NUMBER: 130:335344
TITLE: Simultaneous antisense inhibition of two **starch-synthase** isoforms in potato tubers leads to accumulation of grossly modified amylopectin
AUTHOR(S): Lloyd, James R.; Landschutze, Volker; Kossmann, Jens
CORPORATE SOURCE: Max Plank Institut fur molekulare Pflanzenphysiologie, Golm, 14476, Germany
SOURCE: Biochemical Journal (1999), 338(2), 515-521
CODEN: BIJOAK; ISSN: 0264-6021
PUBLISHER: Portland Press Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
AB A **chimeric** antisense construct was used to reduce the activities of the two major **starch-synthase** isoforms in potato tubers simultaneously. A range of redns. in total **starch-synthase** activities were found in the resulting transgenic plants, up to a max. of 90% inhibition. The redn. in **starch-synthase** activity had a profound effect on the **starch granules**, which became extremely distorted in appearance compared with the control lines. Anal. of the starch indicated that the amts. produced in the tubers, and the amylose content of the starch, were not affected by the redn. in activity. In order to understand why the **starch granules** were distorted, amylopectin was isolated and the constituent chain lengths analyzed. This indicated that the amylopectin was very different to that of the control. It contained more chains of fewer than 15 glucose units in length, and fewer of between 15 and 80 glucose units. In addn., the amylopectin contained more very long chains. Amylopectin from plants repressed in just one of the activities of the two **starch-synthase** isoforms, which we have reported upon previously, were also analyzed. Using a technique different to that used previously it was shown that both isoforms also affect the amylopectin, but in a way that is different to when both isoforms are repressed together.
REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 71 OF 80 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 1998:221118 CAPLUS
DOCUMENT NUMBER: 128:266959
TITLE: Encapsulation of polypeptides within the starch matrix of recombinant plants using the starch-encapsulating domain in **hybrid proteins**
INVENTOR(S): Keeling, Peter; Guan, Hanping
PATENT ASSIGNEE(S): Exseed Genetics L.L.C., USA
SOURCE: PCT Int. Appl., 156 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9814601	A1	19980409	WO 1997-US17555	19970930

W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,

GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

AU 9748030	A1	19980424	AU 1997-48030	19970930
AU 730427	B2	20010308		
EP 935665	A1	19990818	EP 1997-910730	19970930
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
CN 1239514	A	19991222	CN 1997-180232	19970930
BR 9713242	A	20000118	BR 1997-13242	19970930
US 6107060	A	20000822	US 1997-941445	19970930
NZ 334637	A	20010223	NZ 1997-334637	19970930
JP 2001505412	T2	20010424	JP 1998-516777	19970930
MX 9903040	A	20000331	MX 1999-3040	19990330
KR 2000048782	A	20000725	KR 1999-702770	19990330

PRIORITY APPLN. INFO.: US 1996-26855P P 19960930
WO 1997-US17555 W 19970930

AB Hybrid polypeptides are provided formed with encapsulating regions from genes that encode for anabolic proteins. More particularly, the present invention relates to recombinant nucleic acid mols. that code for genes which encapsulate an attached protein within a matrix; preferably, these genes encapsulate a desired ("payload") polypeptide within starch, and more specifically within the **starch granule** matrix. Proteins contg. such starch-encapsulating regions include sol. **starch synthases** I or II or III, granule-bound **starch synthase**, branching enzymes I or IIa or IIb, and glucoamylase, and their nucleic acid sequences are known to the literature. Expression vectors comprising these recombinant nucleic acid mols., and hosts therefor, and more specifically the starch-bearing portions of such hosts, transformed with such vectors, are also provided. For example, a plant expression vector is constructed contg. the maize 10-kDa zein promoter, a maize transit peptide, a starch-encapsulating region from the sol. **starch synthase** I gene, and an attached gene fragment, for expression in rice. Preferably, grain contg. a foreign protein encapsulated within the starch is provided, useful to produce mammalian, fish and avian food. The invention also encompasses methods of producing purified protein from starch and particularly from **starch granules**, and industrial uses of such protein.

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD

L4 ANSWER 64 OF 80 USPATFULL on STN

ACCESSION NUMBER:	2000:109566 USPATFULL
TITLE:	Starch encapsulation
INVENTOR(S):	Keeling, Peter, Ames, IA, United States Guan, Hanping, Ames, IA, United States
PATENT ASSIGNEE(S):	ExSeed GEnetics, L.L.C., Ames, IA, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6107060		20000822	
APPLICATION INFO.:	US 1997-941445		19970930	(8)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 1996-26855P	19960930	(60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	Granted
PRIMARY EXAMINER:	Minnifield, Nita
ASSISTANT EXAMINER:	Zaghmout, Ousama M-Faiz
LEGAL REPRESENTATIVE:	Nixon & Vanderhye P.C.
NUMBER OF CLAIMS:	20
EXEMPLARY CLAIM:	1,7
NUMBER OF DRAWINGS:	9 Drawing Figure(s); 12 Drawing Page(s)
LINE COUNT:	5322

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Hybrid polypeptides are provided formed with encapsulating regions from genes that encode for anabolic proteins. More particularly, the present invention relates to recombinant nucleic acid molecules that code for genes which encapsulate an attached protein within a matrix; preferably, these genes encapsulate a desired ("payload") polypeptide within starch, and more specifically within the **starch granule** matrix. Expression vectors comprising these recombinant nucleic acid molecules, and hosts therefor, and more specifically the starch-bearing portions of such hosts, transformed with such vectors, are also provided. Preferably, grain containing a foreign protein encapsulated within the starch is provided, useful to produce mammalian, fish and avian food. The invention also encompasses methods of producing purified protein from starch and particularly from **starch granules**, and industrial uses of such protein.

L4 ANSWER 62 OF 80 CAPLUS COPYRIGHT 2003 ACS on STN
ACCESSION NUMBER: 2000:842295 CAPLUS
DOCUMENT NUMBER: 134:14733
TITLE: **Fusion proteins** with Chlamydomonas **starch synthase** and food and pharmaceuticals containing starch-**fusion protein** complexes
INVENTOR(S): D'Hulst, Christophe; Ball, Steven
PATENT ASSIGNEE(S): Centre National de la Recherche Scientique, Fr.
SOURCE: PCT Int. Appl., 90 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000071734	A1	20001130	WO 2000-FR1384	20000519
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
FR 2793806	A1	20001124	FR 1999-6494	19990521
FR 2793806	B1	20030425		
EP 1179078	A1	20020213	EP 2000-929649	20000519
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2003500060	T2	20030107	JP 2000-620111	20000519

PRIORITY APPLN. INFO.: FR 1999-6494 A 19990521
WO 2000-FR1384 W 20000519

AB The invention concerns **starch granules** contg. a **hybrid protein** between a **starch synthase** and a protein of interest, the nucleotide sequences used for obtaining same, methods for prepg. them and their uses, particularly in pharmaceutical compns. Thus, the cDNA for the STA2 gene **starch synthase** of C. reinhardtii was cloned and sequenced. A C-terminal-truncated **starch synthase** of 58 kilodaltons (wild-type enzyme: 76 kilodaltons) encoded by the sta2-1 allele was found to have a six-fold increased Km for ADP-glucose and to bind to starch grains with unaltered affinity.

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Freeform Search

Database: US Patents Full-Text Database; US Pre-Grant Publication Full-Text Database; JPO Abstracts Database; EPO Abstracts Database; Derwent World Patents Index; IBM Technical Disclosure Bulletins

Term: L1 same (fusion or hybrid or chimer$)

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L4	L3 same pharmaceu$	1	L4
L3	L1 same (fusion or hybrid or chimer$)	39	L3
L2	L1 same pharmaceu$	3	L2
L1	Starch synthase	381	L1

END OF SEARCH HISTORY

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Search Results - Record(s) 1 through 39 of 39 returned.

☐ 1. Document ID: US 20030159178 A1

L3: Entry 1 of 39 File: PGPB Aug 21, 2003

PGPUB-DOCUMENT-NUMBER: 20030159178
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030159178 A1

TITLE: Method for remodelling cell wall polysaccharide structures in plants

PUBLICATION-DATE: August 21, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Ulvskov, Peter	Charlottenlund		DK	
Shols, Henk	Wageningen		NL	
Visser, Richard	Bennekom		NL	
Borkhardt, Bernhard	Farum		DK	
Sorensen, Susanne	Vallensbaek Strand		DK	
Oomen, Ronald	Zwolle		NL	
Vincken, Jean-Paul	Renkum		NL	
Skjot, Michael	Hedehusene		DK	
Voragen, Chantal Doeswijk	Wageningen		NL	
Beldman, Gerrit	Wageningen		NL	

US-CL-CURRENT: 800/284; 435/200

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

☐ 2. Document ID: US 20030124724 A1

L3: Entry 2 of 39 File: PGPB Jul 3, 2003

PGPUB-DOCUMENT-NUMBER: 20030124724
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030124724 A1

TITLE: Methods for producing and transforming cassava protoplasts

PUBLICATION-DATE: July 3, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Visser, Richard G.F.	ET Bennekom		NL	
Raemakers, Christiaan J.J.	CN Amhem		NL	
Jacobsen, Evert	BD Wageningen		NL	
Bergorvoet van Deelen, Johanna Elizabeth M.	JM Renkum		NL	

US-CL-CURRENT: 435/421; 800/284, 800/298

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 3. Document ID: US 20030106100 A1

L3: Entry 3 of 39 File: PGPB Jun 5, 2003

PGPUB-DOCUMENT-NUMBER: 20030106100
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030106100 A1

TITLE: DNA molecules encoding enzymes involved in starch synthesis, vectors, bacteria, transgenic plant cells and plants containing these molecules

PUBLICATION-DATE: June 5, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kossmann, Jens	Golm		DE	
Springer, Franziska	Berlin		DE	
Abel, Gernot J.	Post Loibichl		AT	

US-CL-CURRENT: 800/284; 435/204, 435/320.1, 435/419, 435/69.1, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | Claims | KWIC | Draw Desc | Image

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☐ 4. Document ID: US 20020194633 A1

L3: Entry 4 of 39 File: PGPB Dec 19, 2002

PGPUB-DOCUMENT-NUMBER: 20020194633
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020194633 A1

TITLE: Novel low density lipoprotein binding proteins and their use in diagnosing and treating atherosclerosis

PUBLICATION-DATE: December 19, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lee, Ann M.	Brookline	MA	US	
Lees, Robert S.	Brookline	MA	US	
Law, Simon W.	Lexington	MA	US	
Arjona, Anibal A.	Boston	MA	US	

US-CL-CURRENT: 800/13; 435/196, 435/320.1, 435/325, 435/69.1, 514/12, 536/23.2

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 5. Document ID: US 20020170092 A1

L3: Entry 5 of 39 File: PGPB Nov 14, 2002

PGPUB-DOCUMENT-NUMBER: 20020170092
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020170092 A1

TITLE: Modification of polysaccharides

PUBLICATION-DATE: November 14, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Turk, S.			US	

US-CL-CURRENT: 800/284; 435/101, 536/123

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 6. Document ID: US 20020152485 A1

L3: Entry 6 of 39 File: PGPB Oct 17, 2002

PGPUB-DOCUMENT-NUMBER: 20020152485
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020152485 A1

TITLE: Novel low density lipoprotein binding proteins and their use in diagnosing and treating atherosclerosis

PUBLICATION-DATE: October 17, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lees, Ann M.	Brookline	MA	US	
Lees, Robert S.	Brookline	MA	US	
Law, Simon W.	Lexington	MA	US	
Arjona, Anibal A.	Boston	MA	US	

US-CL-CURRENT: 800/13; 435/7.1, 514/1, 530/359, 530/388.23, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 7. Document ID: US 20020138876 A1

L3: Entry 7 of 39 File: PGPB Sep 26, 2002

PGPUB-DOCUMENT-NUMBER: 20020138876
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020138876 A1

TITLE: Nucleic acid molecules encoding enzymes from wheat which are involved in starch synthesis

PUBLICATION-DATE: September 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Block, Martina	Bonn		DE	
Lorz, Horst	Hamburg		DE	
Lutticke, Stephanie	Hamburg		DE	
Walter, Lennart	Gluckstadt		DE	
Frohberg, Claus	Berlin		DE	
Kossmann, Jens	Golm		DE	

US-CL-CURRENT: 800/284; 435/204, 435/320.1, 530/370, 536/23.2, 536/23.6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 8. Document ID: US 20020129388 A1

L3: Entry 8 of 39 File: PGPB Sep 12, 2002

PGPUB-DOCUMENT-NUMBER: 20020129388
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020129388 A1

TITLE: Novel low density lipoprotein binding proteins and their use in diagnosing and treating atherosclerosis

PUBLICATION-DATE: September 12, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Lees, Ann M.	Brookline	MA	US	
Lees, Robert S.	Brookline	MA	US	
Law, Simon W.	Lexington	MA	US	
Arjona, Anibal A.	Boston	MA	US	

US-CL-CURRENT: 800/8; 435/320.1, 435/325, 435/69.1, 530/350, 536/23.5

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 9. Document ID: US 20020088023 A1

L3: Entry 9 of 39 File: PGPB Jul 4, 2002

PGPUB-DOCUMENT-NUMBER: 20020088023
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020088023 A1

TITLE: Nucleic acid molecules encoding soluble starch synthases from maize

PUBLICATION-DATE: July 4, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kossmann, Jens	Golm		DE	
Frohberg, Claus	Berlin		DE	

US-CL-CURRENT: 800/284; 536/23.6, 800/278, 800/286

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 10. Document ID: US 20020049997 A1

L3: Entry 10 of 39 File: PGPB Apr 25, 2002

PGPUB-DOCUMENT-NUMBER: 20020049997
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020049997 A1

TITLE: Methods for producing and transforming cassava protoplasts

PUBLICATION-DATE: April 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Visser, R. G.F.	Et Bennekom		NL	
Raemakers, C. J.J.	CN Arnhem		NL	
Jacobson, E.	BD Wageningen		NL	
Bergervoet van Deelen, J. E.M.	JM Renkum		NL	

US-CL-CURRENT: 800/298; 435/410, 435/430, 536/102, 800/286

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 11. Document ID: US 20020029394 A1

L3: Entry 11 of 39 File: PGPB Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020029394
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20020029394 A1

TITLE: Homologs of starch synthase DU1

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Allen, Stephen M.	Wilmington	DE	US	
Beckles, Diane M.	Wilmington	DE	US	
Thorpe, Catherine J.	St. Albans		GB	

US-CL-CURRENT: 800/284; 435/419, 435/69.1, 530/370, 536/23.2, 536/23.6

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

☐ 12. Document ID: US 20010051335 A1

L3: Entry 12 of 39 File: PGPB Dec 13, 2001

PGPUB-DOCUMENT-NUMBER: 20010051335
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010051335 A1

TITLE: POLYNUCLEOTIDES AND POLYPEPTIDES DERIVED FROM CORN TASSEL

PUBLICATION-DATE: December 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
LALGUDI, RAGHUNATH V.	CLAYTON	MO	US	
ITO, LAURA Y.	PLEASANTON	CA	US	
SHERMAN, BRADLEY K.	OAKLAND	CA	US	

US-CL-CURRENT: 435/6; 435/69.1

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 13. Document ID: US 20010011378 A1

L3: Entry 13 of 39 File: PGPB Aug 2, 2001

PGPUB-DOCUMENT-NUMBER: 20010011378
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20010011378 A1

TITLE: Nucleic acid molecules from plants coding enzymes which participate in the starch synthesis

PUBLICATION-DATE: August 2, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Kossmann, Jens	Golm		DE	
Frohberg, Claus	Berlin		DE	

US-CL-CURRENT: 800/278

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 14. Document ID: US 6617495 B2

L3: Entry 14 of 39 File: USPT Sep 9, 2003

US-PAT-NO: 6617495
DOCUMENT-IDENTIFIER: US 6617495 B2

TITLE: Nucleic acid molecules from plants coding enzymes which participate in the starch synthesis

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments | KWIC | Draw Desc | Image

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☐ 15. Document ID: US 6605588 B1

L3: Entry 15 of 39 File: USPT Aug 12, 2003

US-PAT-NO: 6605588
DOCUMENT-IDENTIFIER: US 6605588 B1

TITLE: Low density lipoprotein binding proteins and their use in diagnosing and treating atherosclerosis

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 16. Document ID: US 6570008 B1

L3: Entry 16 of 39 File: USPT May 27, 2003

US-PAT-NO: 6570008
DOCUMENT-IDENTIFIER: US 6570008 B1

TITLE: Modification of starch biosynthetic enzyme gene expression to produce starches in grain crops

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 17. Document ID: US 6551827 B1

L3: Entry 17 of 39 File: USPT Apr 22, 2003

US-PAT-NO: 6551827
DOCUMENT-IDENTIFIER: US 6551827 B1

TITLE: Methods for producing and transforming cassave protoplasts

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 18. Document ID: US 6538179 B1

L3: Entry 18 of 39 File: USPT Mar 25, 2003

US-PAT-NO: 6538179
DOCUMENT-IDENTIFIER: US 6538179 B1

TITLE: Enhanced starch biosynthesis in seeds

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 19. Document ID: US 6483010 B1

L3: Entry 19 of 39 File: USPT Nov 19, 2002

US-PAT-NO: 6483010
DOCUMENT-IDENTIFIER: US 6483010 B1
**** See image for Certificate of Correction ****

TITLE: DNA molecules encoding enzymes involved in starch synthesis, vectors, bacteria, transgenic plant cells and plants containing these molecules

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 20. Document ID: US 6476212 B1

L3: Entry 20 of 39 File: USPT Nov 5, 2002

US-PAT-NO: 6476212
DOCUMENT-IDENTIFIER: US 6476212 B1
**** See image for Certificate of Correction ****

TITLE: Polynucleotides and polypeptides derived from corn ear

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 21. Document ID: US 6468799 B1

L3: Entry 21 of 39 File: USPT Oct 22, 2002

US-PAT-NO: 6468799
DOCUMENT-IDENTIFIER: US 6468799 B1

TITLE: Genetically modified plants with altered starch

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 22. Document ID: US 6392120 B1

L3: Entry 22 of 39 File: USPT May 21, 2002

US-PAT-NO: 6392120
DOCUMENT-IDENTIFIER: US 6392120 B1

TITLE: Modification of starch biosynthetic enzyme gene expression to produce starches in grain crops

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 23. Document ID: US 6376749 B1

L3: Entry 23 of 39 File: USPT Apr 23, 2002

US-PAT-NO: 6376749
DOCUMENT-IDENTIFIER: US 6376749 B1

TITLE: Starches via modification of expression of starch biosynthetic enzyme genes

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 24. Document ID: US 6365800 B1

L3: Entry 24 of 39 File: USPT Apr 2, 2002

US-PAT-NO: 6365800
DOCUMENT-IDENTIFIER: US 6365800 B1

TITLE: Transgenic crops accumulating fructose polymers and methods for their

production

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 25. Document ID: US 6307125 B1

L3: Entry 25 of 39 File: USPT Oct 23, 2001

US-PAT-NO: 6307125
DOCUMENT-IDENTIFIER: US 6307125 B1
**** See image for Certificate of Correction ****

TITLE: Nucleic acid molecules encoding enzymes from wheat which are involved in starch synthesis

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 26. Document ID: US 6307124 B1

L3: Entry 26 of 39 File: USPT Oct 23, 2001

US-PAT-NO: 6307124
DOCUMENT-IDENTIFIER: US 6307124 B1
**** See image for Certificate of Correction ****

TITLE: Nucleic acid molecules encoding soluble starch synthases from maize

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 27. Document ID: US 6211436 B1

L3: Entry 27 of 39 File: USPT Apr 3, 2001

US-PAT-NO: 6211436
DOCUMENT-IDENTIFIER: US 6211436 B1

TITLE: Nucleic acid molecules from plants coding enzymes which participate in the starch synthesis

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 28. Document ID: US 6130367 A

L3: Entry 28 of 39 File: USPT Oct 10, 2000

US-PAT-NO: 6130367
DOCUMENT-IDENTIFIER: US 6130367 A

TITLE: DNA molecules that code for enzymes involved in starch synthesis, vectors, bacteria, transgenic plant cells and plants containing said molecules

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 29. Document ID: US 6107060 A

L3: Entry 29 of 39 File: USPT Aug 22, 2000

US-PAT-NO: 6107060
DOCUMENT-IDENTIFIER: US 6107060 A

TITLE: Starch encapsulation

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 30. Document ID: US 5981728 A

L3: Entry 30 of 39 File: USPT Nov 9, 1999

US-PAT-NO: 5981728
DOCUMENT-IDENTIFIER: US 5981728 A

TITLE: Dull1 coding for a novel starch synthase and uses thereof

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 31. Document ID: US 5824790 A

L3: Entry 31 of 39 File: USPT Oct 20, 1998

US-PAT-NO: 5824790
DOCUMENT-IDENTIFIER: US 5824790 A

TITLE: Modification of starch synthesis in plants

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 32. Document ID: US 5608149 A

L3: Entry 32 of 39 File: USPT Mar 4, 1997

US-PAT-NO: 5608149
DOCUMENT-IDENTIFIER: US 5608149 A

TITLE: Enhanced starch biosynthesis in tomatoes

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 33. Document ID: US 5536653 A

L3: Entry 33 of 39 File: USPT Jul 16, 1996

US-PAT-NO: 5536653
DOCUMENT-IDENTIFIER: US 5536653 A

TITLE: Tomato fruit promoters

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 34. Document ID: US 5498830 A

L3: Entry 34 of 39 File: USPT Mar 12, 1996

US-PAT-NO: 5498830
DOCUMENT-IDENTIFIER: US 5498830 A

TITLE: Decreased oil content in plant seeds

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 35. Document ID: WO 2079410 A2

L3: Entry 35 of 39 File: EPAB Oct 10, 2002

PUB-NO: WO002079410A2
DOCUMENT-IDENTIFIER: WO 2079410 A2
TITLE: GLUCAN CHAIN LENGTH DOMAINS

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 36. Document ID: WO 9411520 A2

L3: Entry 36 of 39 File: EPAB May 26, 1994

PUB-NO: WO009411520A2
DOCUMENT-IDENTIFIER: WO 9411520 A2
TITLE: NOVEL PLANTS AND PROCESSES FOR OBTAINING THEM

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 37. Document ID: WO 200279410 A2

L3: Entry 37 of 39 File: DWPI Oct 10, 2002

DERWENT-ACC-NO: 2003-040678
DERWENT-WEEK: 200303
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TITLE: New DNA encoding fusion protein consisting of 4 different functional domains selected from glucan association domain, linker domain, glucosyl transferase domain, and C-terminal end, useful for producing modified starches

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments KWIC | Draw Desc | Image

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☐ 38. Document ID: JP 2003500060 W FR 2793806 A1 WO 200071734 A1 AU 200047659 A EP 1179078 A1

L3: Entry 38 of 39 File: DWPI Jan 7, 2003

DERWENT-ACC-NO: 2001-052291
DERWENT-WEEK: 200314

TITLE: New recombinant nucleic acid encoding fusion of starch synthase and second component, useful in pharmaceutical and food compositions, is targeted to starch granules

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments

KWIC | Draw Desc | Image

☐ 39. Document ID: US 6570008 B1 WO 200006755 A2 AU 9952174 A EP 1100938 A2 BR 9912680 A CN 1314946 A HU 200104208 A2 MX 2001000503 A1 US 6392120 B1 JP 2002525029 W

L3: Entry 39 of 39 File: DWPI May 27, 2003

DERWENT-ACC-NO: 2000-195311
DERWENT-WEEK: 200337

TITLE: Producing transgenic cereal crops with altered starch structure useful for preparing foodstuff, paper, plastic or adhesives, comprises transforming crops with chimeric sense or antisense gene construct encoding starch synthase

Full | Title | Citation | Front | Review | Classification | Date | Reference | Sequences | Attachments

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Terms	Documents
L1 same (fusion or hybrid or chimer$)	39

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